[Lefschetz] once dismissed a clever new proof of one of his theorems by saying, "Don't come to me with your pretty proofs. We don't bother with that baby stuff around here." Legend had it that he never wrote a correct proof...

-Sylvia Nasar in A Beautiful Mind

# THE TRIVIAL NOTIONS SEMINAR

#### Wyatt Reeves

will speak on

### Applications of the Lefschetz Fixed-point Theorem

#### ABSTRACT

The Lefschetz fixed-point theorem is a fundamental result in algebraic topology that relates the local behavior of a map around its fixed points to the effect of the map on cohomology. We will investigate the consequences of this theorem for the theory of zeta functions and the physics of rigid body motion.

We will prove the Riemann Hypothesis.

We will NOT prove the Lefschetz fixed-point theorem.

I will throw things in the air.

(Boba will be provided.)

## Friday, 16 September, 2022 at 12pm Science Center, Room 232